

# Pacific Coast Forests Last Big Supply



YELLOW PINE

THE forests of the Pacific coast states comprise our last great body of coniferous timber and contain practically half of the remaining saw timber in the United States, according to a report on timber depletion made to the United States senate by the forest service of the United States department of agriculture. The development of the lumber industry of the region, however, has already progressed far. Within the last year shipments to eastern markets have largely increased, and points formerly supplied by yellow pine have been invaded up to the very boundaries of the yellow-pine-producing territory. Approximately three and one-half times as much timber is being taken from the Pacific coast forests as is produced by growth, while for timber of saw timber size the depletion is nine times the growth.

## Large Virgin Stands.

The commercial forest area of the Pacific coast states, the report says, has been reduced to approximately 87,686,000 acres. "A large percentage of this, about 39,370,000 acres, is in virgin stands." Not all of this, however, is accessible high-grade timber, for there is a large percentage of relatively inferior and inaccessible areas. "This is an important factor which is usually overlooked in the consideration of the western timber supply." Second growth of saw timber size covers about 5,282,000 acres, and smaller second growth of 6,425,000 acres, while non-restocking forests cover 6,500,000 acres.

The present stand of timber is estimated to contain about 1,141,000,000 board feet. Of this amount, Oregon has a total stand of nearly 494,000,000 feet, Washington has 334,000,000 feet, and California over 313,000,000 feet. More than one-half of the total, or about 686,000,000 board feet, occurs in the Douglas fir belt of western Oregon and Washington. Douglas fir comprises approximately 558,000,000 board feet, and of this 505,000,000 board feet, or nearly one-fourth of the remaining saw timber in the United States, is in Washington and Oregon.

## Cut-Over Area Large.

Already there is a cut-over area of approximately 6,125,000 acres, the report states. Of this amount about two-thirds is in Washington and Oregon, and a very large percentage is west of the Cascades in the Douglas fir belt. The area burned over annually in the three Pacific coast states is found by the forest service to amount to 450,000 acres, and the loss in timber to about 600,000,000 board feet.

The annual drain on the forests of the Pacific coast states is estimated to be about 11,380,000,000 feet, according to the report. The total annual growth of the forests is equivalent to about 2,100,000,000 board feet. Depletion of the forests, therefore, approximates three and one-half times the growth, while depletion of saw timber is approximately nine times the growth of the same class of material. One reason for the comparatively small amount of growth is, of course, the fact that very much of the territory is occupied by virgin stands.

In spite of the tremendous supplies of timber, in certain localities a large proportion of local timber has been cut and logging operations are being pushed back to the less accessible timber in the rougher mountain regions, the report points out. "The exhaustion of local supplies is a vital matter to local prosperity and development. It means the cessation of a local industry, the abandonment of im-



RAVAGES OF FIRE



ENGELMANN SPRUCE



CALIFORNIA REDWOODS

provements, rapid depreciation of investments, and other losses which the industry, the community, and the consumer must shoulder."

## Being Cut Rapidly.

The timber stand in California is being cut at the rate of about 1,500,000,000 feet annually. "Practically all of the cut, up to the present time, has been in the most accessible stands, whereas a considerable part of the remaining timber is comparatively inaccessible," the report says. "Logging operations are removing annually a little less than 2 per cent of western Washington's and less than 1 per cent of western Oregon's timber. Yet the reasonably accessible timber and that in private ownership is going very much faster; and, with decreasing southern pine production, enormous pressure to increase the cut may be expected."

As an example, the situation in Gray's Harbor county is cited: "About 20 years ago there were in this county 750,000 acres of timber and only about 75,000 acres of cuttings. Now there are 355,000 acres of stumps. One-sixteenth of the county's private timber land is being cut over annually. In 25 years the supply of privately owned virgin timber will be gone."

It has been found that in western Washington about 85,000 acres annually, and in eastern Washington 39,000 acres annually were cut over from 1909 to 1919. All things considered, it is expected by an authority on the lumber supplies of Washington that the privately-owned virgin timber supply of the state will be virtually gone in 20 years unless forest policies are changed.

## Local Consumption a Factor.

Forest depletion in Washington has proceeded much further than in Oregon, the report says; and while an expansion of the industry in Washington under the increased demands from eastern markets may reasonably be expected, by far the greater part of the expansion may be looked for in Oregon. "The reason for the slower development in Oregon lies in the inaccessibility of its Douglas fir stands. Many operations now being seriously considered for Oregon will require transportation and other investments running into the millions of dollars before any timber can be taken."

Local consumption must be taken into account in considering the de-

mand upon the forests, the report points out. The situation in California is cited as an example. That state has been an important source of export material from the earliest days. Large quantities of lumber are still exported from it to the east and to foreign countries, but the state's population and agricultural and industrial development have more than kept pace with the output of lumber, so that it is doubtful whether production has exceeded consumption since about 1875. "The per capita lumber cut of the state has been approximately equal or slightly in excess of the average per capita consumption of the United States since between 1869 and 1879, while the average consumption of the state is probably somewhat greater than for the country as a whole," the report says. "In 1919, southern California alone used the equivalent of about one-half the total cut of the state, a per capita consumption of at least twice that of the whole United States."

## Big Increase in Cut.

It can be expected, according to the report, that the lumber cut for the Pacific coast states as a whole will increase very materially during the next ten years. It says: "A gradual rise in logging costs is inevitable as the more accessible stands are cut, and it becomes necessary to extend operations to the more mountainous logging chances. The timber resources of the Pacific coast states are very large, but it would be very unwise to overestimate them, for much less than the total stand is readily available. Existing transportation facilities to the east are already overburdened with present traffic, and they will have to be very materially increased to meet the probable reduction in eastern and southern lumber cut during the next ten years."

Although the Pacific coast states have large amounts of timber, the report points out that they will be called on to supply increasing amounts of lumber for the whole country. The danger is that, like other forested regions, they will be considered "inexhaustible" until it is too late. While the government has established a number of national forests in these states which are devoted to growing timber, other measures are necessary to prevent depletion of the Pacific coast forests.

In Yukon territory the brown bear of Kadlak Island, the largest of the Alaskan bears, is found, while the great white bear, which provides excitement a plenty for the most skillful hunter, stalks the Herschel Island section of the arctic circle with defiance for all. Many other fur-bearing animals bring big returns to the trappers.

To cool the air in a room an Iowa inventor has combined a fan to hold a block of ice with an electric fan.

# CLAIMS HE IS CZAR NICHOLAS

Claimant to Throne of Russia  
Reported to Be Gathering  
Support in Siberia.

## SAYS SERVANT WAS KILLED

Present Soviet Government Has Offered 2,000,000 Rubles for Alleged Pretender's Head—Pretenders of Bygone Days.

New York.—A recent dispatch from London brings the information that a man purporting to be Czar Nicholas II of Russia is raising a large following in Siberia. According to his allegations, he asserts that it was one of his faithful servants who was killed in his place by the bolsheviks at Ekaterinburg over two years ago. The present Soviet government has offered a reward of 2,000,000 rubles for this alleged pretender's head.

If this man is an impostor another name can be added to the long list of pretenders to the crowns of Europe. In bygone days some were successful in establishing their claims, while others paid the penalty for their false allegations on the guillotine. One of the successful claimants to a throne of Europe proved to be a wise and able ruler.

About 1493 a mysterious stranger appeared in Cork, Ireland, where the people greeted him as the brother of Edward IV of England, but he denied this. They then claimed that he was the son of Richard III, and he denied this too. But at length he admitted that he was the duke of York, one of the two princes whom it was believed Richard III had murdered in the tower of London.

Members of the nobility came from England, and after questioning the stranger they were convinced that he was the duke of York. He then called himself Richard Plantagenet, duke of York, son of Edward IV, and by right of succession Richard IV of England.

Henry VII was then ruler of England, and he did all in his power to thwart the designs of the new claimant to the throne. He succeeded in driving him out of France by forcing Charles VIII to banish him, and he defeated him when he invaded England from Scotland. Richard IV then sought refuge in Cornwall and later marched on London at the head of 7,000 Cornishmen who rallied to his banner, but he was defeated and taken prisoner.

## Admitted He Was Adventurer.

It was said that Henry VII obtained a confession from him by torture. He admitted that he was one Perkin Warbeck, an adventurer from Picardy. After several weeks in the public stocks this pretender was executed.

James II became unpopular by favoring the church of Rome, so William and Mary were invited to accept the throne of England, since Mary was the eldest child of Charles II. But a year before they assumed their regal duties it was announced that James' consort was about to present him with an heir.

However, a rumor spread that James was about to pass off on the unsuspecting public as his heir a child that was not his own. The birth of Prince James Francis Edward Stuart, who was known in later years as the Chevalier St. George, was witnessed by persons not really believed by the people. The following year James II was forced to flee to France.

Many years later the two daughters of Sir Theophilus Oglethorpe, who was a faithful follower of James II, were overheard by Frances Shaftoe, a seamstress, to remark that James Stuart, the Chevalier St. George, was their brother. One night the queen's infant died of convulsions at Windsor and Lady Oglethorpe brought her son, nine days older, to the castle and he was substituted for the prince. Oglethorpe's daughters had Frances

Shaftoe confined in a French convent when they learned she shared their secret, but she succeeded in sending word to her mother. When it was published that Oglethorpe's son was supposed to be the prince the Chevalier St. George's plans in Scotland failed. Immediately after Catharine and Peter III ascended the throne of Russia Catharine had her husband thrown into prison and later reported his

death. Five years later a stranger who said he was Czar Peter III turned up in Montenegro. The people of that country were sorely in need of a ruler, so they asked the alleged Peter to lead their armies in battle, and later he took over the reins of government under the title of Stephen the Little. He established courts of law and bettered living conditions throughout the country.

Catharine soon learned that Montenegro was a power to be reckoned with, so she denounced Stephen as an impostor. He was thrown into jail and a representative of Catharine visited him. Presumably they came to some agreement and Stephen was permitted to return to his throne.

## American Boy Scouts in Paris



American boy scouts taking part in ceremonies at Paris during their reception in that city. Two young girls symbolizing France and America, are sitting on the platform, before which the maneuvers were held.

# PRESERVE EGGS BY SOAP FILM

Oklahoma Scientists Describe  
Method of Conserving Hen  
Product in Good Flavor.

## ALUMINUM SOAP IDEAL SEALER

Perfect Process Which Keeps Contents of Egg Sweet and Leaves No Trace of Foreign Flavor—Result of Long Research.

Chicago.—Eggs can now be preserved by putting on their shells a thin film of aluminum soap. The process, one of the newer methods employed in guarding the product of the lowly hen from spoilage, is described in the current number of the Journal of Industrial and Engineering Chemistry.

Its description occurs in an article by Drs. Hilton Ira Jones and Robert Du Bois of the department of chemistry at the Oklahoma Agricultural and Mechanical college at Stillwater, Okla., who have made an intensive study of the subject.

Those scientists began their researches on this line a year or so ago and have not only suggested important improvements in egg preservation but have prepared a catalogue of the books and articles which constitute the first bibliography of the salvage of the egg.

One-Quarter Spoilage. The practical bearing of their investigation is shown by their statement that egg dealers handling mil-

lions of dollars a year report losses from spoilage as high as 25 per cent.

Beginning with the earliest expedient, that of burying or packing the eggs in an air-tight substance, the authors carry their scientific readers through the entire range of the literature of egg preservation from salt to water glass. They find various faults with the sealing agents employed.

They then tried aluminum soap, and recommend it for further investigation and experiment. This substance can be prepared with soap solution, to which can be added a solution of some salt of aluminum, such as the alum of commerce, which is a sulphate of aluminum and potassium. Although the resulting precipitate is technically a soap, it is insoluble in water and must be dissolved by some such agent as gasoline, so that a film may be quickly and cheaply formed upon the shell by dipping the eggs in a solution of it. The soap itself is odorless and tasteless and therefore makes an ideal sealer, since it has no effect upon the egg. The experimenters found, however, that the usual solvent, gasoline, left a slight taste on the shell of the egg which was imparted to the contents.

Two methods of solving the problem of obtaining a tasteless application were tried and both were successful.

## Wholly Satisfactory.

"The first," to quote the authors, "was to protect the eggs by a preliminary coating before sealing with the gasoline solution. The best agent for this purpose is dilute sulphuric acid. When eggs are immersed in the acid effervescence continues for about ten seconds and ceases as a coating of calcium sulphate is formed in the pores of the egg shells. The calcium sulphate acts as a polarizer and stops the reaction. The eggs are then dipped without drying into the aluminum soap solution and placed in a special dripping rack. The method of double sealing with sulphuric acid seems wholly satisfactory. The contents of the egg are sweet, and no taste of gasoline can be detected. The extra cost of the preliminary sealing, either in time or money, is negligible.

"The necessity of double dipping is without doubt a weakness and a better solution of the problem was found. Gasoline is composed largely of pentane, a practically tasteless, odorless and colorless liquid. Since gasoline dissolves aluminum soap well, it is certain that its chief constituent would do so, and the problem was to prepare chemically pure pentane on a large scale.

"The best method of preparing pentane seems to be the reduction of amylene. A very convenient and cheap process of making amylene or pentane has recently been devised by Dr. Roger Adams. By fractional distillation practically odorless and tasteless pentane can be produced. The cheapness with which pentane can now be made and the facility with which the product can be used to dissolve aluminum soap seem to make this solution of the problem satisfactory in every way."

The opal shows its colors best when warms.

## HAS FOOD FOR FUR HUNTERS

Power Schooner Ruby on Trip to Herschel Island, Beyond Arctic Circle.

Seattle.—The power schooner Ruby, carrying a cargo of 600 tons, has started on the long trip to Herschel Island, which lies far beyond the arctic circle.

The big cargo includes supplies for the scarlet riders, the royal northwest mounted police, who patrol the

far-flung stretches of this adventurous land, and for the fur trading post of the Hudson's Bay company. Bands of Eskimos and many white trappers have cashed in the pelts resulting from last season's work. When the Ruby turns homeward she will be laden with furs from this rich post, which, like other Hudson's Bay posts, is being developed more extensively with the closing out to colonists of the company's remaining farm lands to give greater attention to the fur trade.

## Polish Women Fighters Enjoy a Rest



This photograph, sent from Warsaw after the bolsheviks started the drive on that city, shows members of the Legion of Polish Women, fighters who helped to defend their city, laying their feet after a hard day's march.